Inner Melbourne Action Plan

IMAP Action 2.3 – Bicycle Network Legibility

Final Report

Background

The initial aim of Action 2.3 was to improve the legibility of the IMAP bicycle network through the adoption of uniform techniques for marking bicycle lanes and paths and the completion of gaps in the existing bicycle network in the IMAP area. However, during the project it became clear that much of this work was done or in existing capital works programs. It was determined that the more important thing to do, to improve the bicycle network and stimulate more cycling in Inner Melbourne, is to improve the quality of bicycle routes so that the network becomes much more like the separated, on-road bicycle networks of leading European cities. In some cases improvements to existing routes will make a greater contribution to encouraging more cycling than completing gaps.

During the completion of this Action, the project team addressed the questions of what will the future IMAP bicycle network look like, how will we decide which routes will be the highest priorities to improve, what sort of improvements will we seek and what other things will we need to do to support this process.

Key outcomes

This section details the key outcomes of Action 2.3.

A.   Agreement on IMAP bicycle network

A key outcome has been the development of a plan for an IMAP bicycle network. In the IMAP area, this network effectively replaces Melbourne's Principal Bicycle Network (PBN) which was drawn up in the early 1990s. It also changes our understanding of what a bicycle network for Melbourne should be. The Principal Bicycle Network (PBN) was envisaged to be a network largely made up of white lines on main roads marking bicycle lanes and wide kerbside lanes. These mostly low-cost facilities which can be installed without much impact on other road users have helped stimulate bicycle use to the current level. These types of facilities will continue to be widely used by cyclists.

However, in order to achieve the cycling goals of IMAP and those of its member Councils, a separated, on-road bicycle network similar to that of leading European cities is required. The IMAP Bicycle Network is the 'first cut' at describing this network and selecting the routes that will be on it. Much work remains in developing the designs that will build it and gaining the support to make it happen.

The IMAP Bicycle Network is a hierarchy of Priority Routes, Support Routes, Local Routes and Quiet Local Streets. This hierarchy is similar to the hierarchy used to plan road networks with freeways, main roads, collector roads and local streets.

The plan suggests that Priority Routes are expected to shoulder the task of transporting the largest number of cyclists and thus are expected to offer the highest level of service to cyclists. Hence they would attract the lion's share of investment. High levels of service would be provided by wider lanes, separated lanes, coloured lanes, priority at signals and other engineering treatments common to priority routes in European cities.

The attached network report, "Bicycle Victoria's Review of the Priority Bike Route Network for IMAP" (January 2008), details how decisions were made regarding which routes should be Priority Routes. Some of the key criteria were that the routes should cross Council boundaries (and be viable main cycling routes once they have left IMAP boundaries), should have the potential to become main cycling corridors and generally have attracted enough users today to indicate future potential.

Like the road network, the IMAP bicycle network will remain a living document which can be changed and improved based on changes to life in Melbourne. For example, some bicycle routes may not attract as many riders as currently predicted and may lose their status as Priority Routes. Some Support Routes may be promoted to Priority Route status. Changes to land uses, new developments or new technologies may open up new opportunities for bicycle routes.

The development of the IMAP Bicycle Network will have a significant impact on the direction of IMAP Action 2.5 (Bicycle Network). Currently this Action is about completing the PBN in the IMAP area. The clear findings of Action 2.3 are that completing the PBN will not be enough to stimulate the level of cycling growth that the IMAP councils are seeking. The project finds that the IMAP Councils would be better served by investing in a coordinated way in the priority routes described in the IMAP bicycle network. Some of these are on the PBN.

It is also proposed for Action 2.5 that, for the reasons outlined above, the concept of "completing" the network is discarded. The IMAP bicycle network will remain a work in progress for many years to come just like the existing road, rail, tram and pedestrian networks.

B.   Super Tuesday count program begun

During the project, the IMAP Councils, in cooperation with Bicycle Victoria, organised a bicycle count at more than 100 locations throughout the IMAP area from 7am to 9am on Tuesday 6 March 2007. This was the first time such a large count had been coordinated across so many sites in Australia. It allows sites to be compared against each other to see how each is performing in attracting riders.

The success of this count has attracted other councils. The 2008 Super Tuesday count will include more than 250 sites and more than 12 participating councils.

The completion of the 2007 Super Tuesday count has helped the project team to realise that the construction of a high quality, sophisticated cycling network will need to be based on significantly more data than is currently available.

This data could include information, such as:
  ▪   where cyclists want to travel,
  ▪   how comfortable they feel using various different types of facilities,
  ▪   how satisfied they are with different facilities,
  ▪   which facilities make the greatest contribution to improving safety

As the IMAP Bicycle Network develops, there is likely to be increased competition for roadspace among a variety of users including the different modes and especially related to the use of roadspace for parking. There will need to be more data and information gathered on the economic value of parking spaces and the circumstances under which parking spaces can be removed or relocated.

It is also clear that the expected significantly greater investment that will be required to construct Priority Routes will be subject to greater scrutiny and based much more on evidence. Improvements to a specific route will need to be cost-effective investments that provide the greatest possible return in terms of attracting cyclists and stimulating cycling. There is currently relatively little information on the cost-effectiveness of different types of bicycle treatments in different locations.

C.   Discussions with stakeholders and partners

The project team held a meeting on 6 December 2007 to present the IMAP Bicycle Network to key stakeholders who will play a significant role in its implementation. Those invited included staff from VicRoads, Parks Victoria, Department of Infrastructure, traffic design consultants, IMAP Councils, IMAP Action 2.3 project team and staff from neighbouring councils.

This meeting began the process of disseminating information about the IMAP Bicycle Network to stakeholders to ensure that the network is taken into account when other development occurs and to take advantage of various opportunities to develop the network.

This process of dissemination will need to be significantly enhanced to ensure the IMAP Bicycle Network is embedded in the future plans and policies of various stakeholders.

D.   Capacity building

The 6 December 2007 stakeholders' meeting was a watershed in understanding that the delivery of the IMAP Bicycle Network will require significant changes in current practice for most stakeholders. For example, currently available engineering design standards and guidelines for bicycle facilities in Australia do not meet the requirements of a separated bicycle network. New engineering guidelines will need to be developed and IMAP Councils will need to take the lead on this issue.

Examples of current innovative bicycle lane design in the IMAP region include:
- the separated bicycle lanes on Swanston Street in the City of Melbourne are an example of developing a facility which could become the basis for a new design guideline. However, given its very high cost and applicability only on wide roads, the Swanston Street model is only one of many types of facilities that will be needed to build the IMAP Bicycle Network.
- the use of "vibra-line" to separate lanes in the City of Melbourne. Vibra-line has previously been used on high-speed country roads including freeways to alert drivers when they stray from their lane by creating a vibration in the vehicle by using raised bars of road-marking material.
- the VicRoads proposal for cycle-only traffic signals at the intersection of Napier and Johnston Streets in Fitzroy,
- the narrow central vehicle lane design shared by vehicles going in both directions with bicycle lanes on Napier Street Fitzroy,
- the new separated bicycle lane on Cecil Street outside the South Melbourne market; and
- the proposal for full-length green bicycle lanes with advance signals for cyclists on Langridge Street in Collingwood.

Bicycle Victoria has recently begun a study into the different types of separation devices that could be used to enhance bicycle lanes in cases where there is limited roadspace available (unlike Swanston Street). The results of this work will be shared among the IMAP councils and others.

There needs to be a significantly greater level of information sharing among IMAP and neighbouring Councils on techniques and facilities that are successful in constructing the IMAP Bicycle Network. Previously the level of information sharing has been sporadic. Many of those present at the 6 December 2007 meeting agreed to continue to participate in future similar meetings to share ideas and concepts for improving bicycle infrastructure.

It became clear during the 6 December meeting that the IMAP Councils and other organisations will need to take the lead on developing new specifications and designs for treatments to improve bicycle separation. City of Melbourne has already done this with the Swanston Street separation treatment and the use of vibra-line for separation. However the Swanston treatment is only one way to deliver separation and was relatively expensive.

E.   Immediate cycle network improvements

The attached report "Bicycle Victoria's Review of the Priority Bike Route Network for IMAP" outlines some sections of the IMAP Bicycle Network that can be completed relatively quickly in each of the IMAP municipalities in section 4.3. IMAP councils should consider these improvements during capital works planning for 2008 - 2009.

F.   Completed cycle network improvements

During the work of Action 2.3, the IMAP Councils continued to expand their bicycle networks. The following facilities were constructed during the last year.

Melbourne

- Wellington Parade South - Bicycle Lane - between Jolimont Road and Clarendon Street- providing a continuous link between Spring Street/Flinders Street and Hoddle Street (Municipal boundary to east) and Victoria Parade/Powlett Street (Municipal boundary to the north)
- Oak Street -shared path and Manningham Street- bicycle lane connecting City Link/ Moonee Ponds Creek path to Park Street (Municipal Boundary) and the City Trail.
- Macaulay Road -bicycle lanes -between Epsom Road and Boundary Road providing a continuous link from Macaulay Road , North Melbourne and Epsom Road (Municipal boundary)

- Elgin Street - reduce wide bluestone channel - west of Lygon Street- improving link from Nicholson Street (Municipal boundary) to the University of Melbourne.
- Swanston Street - Copenhagen Treatment- between Victoria Street and Faraday Street.
- Swanston Street - bicycle lanes between Elgin Street and Cemetery Road East
- Spring Street -bicycle lanes - between Wellington Parade and Albert Street
- Faraday Street/Swanston Street/University of Melbourne - bicycle/pedestrian separation footpath extension
- Franklin/Queen Street Roundabout - Green annulus bicycle lane
- Gisborne Street green bicycle lane
- City Streets past platform tram stops - green bicycle lanes
- Capital city Trail -$20,000 of linemarking and directional signage
- 100 bicycle hoops installed

City of Port Phillip
- Improvements to Beach Road Stage 3
- Upgrade of Foreshore Promenade (Bay Trail)

City of Stonnington
- City of Stonnington allocated $70,000 for 2007/08 for on-road improvements to its bicycle network. Locations for these improvements are to be resolved.

City of Yarra
- Design completed for Napier Street bicycle only signals for VicRoads bid for 2008/09 construction
- Design begun for Langridge Street bicycle lane upgrade for VicRoads bid for 2008/09 construction
- Design options completed for removal of Gipps Street steps on Main Yarra Trail in Collingwood
- Design options completed for upgrade of Merri Creek trail in North Fitzroy
- New bicycle lanes on Langridge Street, Collingwood on the approach and departure of Hoddle Street both east and west sides
- New bicycle lanes on St Georges Road, Edinburgh Gardens to Nicholson Street North Fitzroy
- New bicycle lanes on Highett Street Richmond, Church Street to Muir Street, including bicycle right hand turn lane to Lennox Street
- New bicycle lanes on Rushall Crescent North Fitzroy from Queens Parade to Park Street.
- New bicycle lanes on Napier Street Fitzroy, Moor Street to Johnston Street using new narrow central vehicle lane design shared by vehicles going in both directions with bicycle lanes
- New contra flow bicycle lanes on Lee Street North Carlton
- New contra flow bicycle lanes on Church Street, North Fitzroy
- New contra flow bicycle lanes on Moor Street, Fitzroy
- New ramps cut through tram barrier on Nicholson Street Fitzroy and North Fitzroy to facilitate cyclists crossing this main road
- New ramp on Curtain Street through the Canning Street road closure

Conclusion

In conclusion, five key areas of action were undertaken or identified by the IMAP Action 2.3 Bicycle Network Legibility working group.

1. The identification and agreement of a new priority bike route network for the inner region as described in the attached paper: "Bicycle Victoria's Review of the Priority Bike Route Network for IMAP" and identified network gaps that can be rapidly addressed.

2. That the new project team which will deliver Action 2.5 should re-evaluate the Action in the light of the results of Action 2.3. The focus of Action 2.5 should be on making the IMAP Bicycle Network a reality and boosting the level of cycling in inner Melbourne as quickly as possible. Key sub-tasks are likely to be prioritising the routes to be constructed, coordinating these across council boundaries and deciding on appropriate design treatments.

3. That the IMAP Councils should continue the Super Tuesday bicycle counts as an annual project, expand and develop the concept with neighbouring Councils, disseminate the concept widely and pursue other opportunities to gather more empirical evidence about cyclist numbers.

4. That the IMAP Councils should consider setting up a formal structure to guide the development of the IMAP Bicycle Network, including processes for reporting on progress, highlighting achievements and

building local capacity. This structure could include senior staff representatives of IMAP Councils and provide for regular, formal interactions with senior staff from VicRoads, Department of Infrastructure, Parks Victoria and Bicycle Victoria.

5.   That the IMAP Councils should commit to a program of improving the quality and amount of data and research on cycling in Melbourne as well as designs for bicycle facilities and sharing that information as widely as possible throughout IMAP Councils, the wider transport community and the general community.

Recommendations

That the IMAP Implementation Committee resolves to:

(a)   **Adopt** the IMAP Bicycle Network as described in "Bicycle Victoria's Review of the Priority Bike Route Network for IMAP" (January 2008);

(b)   **Agree** that the Action 2.5 working group re-evaluate the scope of Action 2.5 to reflect the needs identified in Action 2.3;

(c)   **Agree** to continue to support the 'Super Tuesday' bicycle counts;

(d)   **Support** the development a formal structure to guide the development of the IMAP Bicycle Network, including processes for reporting on progress, highlighting achievements and building local capacity;

(e)   **Support** the development of a program of improving the quality and amount of data and research on cycling in Melbourne, including bicycle facilities design and information sharing.